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**Helps tourists to customize travel plans easily with local experience:
Dotrips app**

By Shenyu Zhang

A thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Fine
Arts in Visual Communication Design

School of Design
College of Art and Design
Rochester Institute of Technology
Rochester, NY
August 1, 2021

Committee Approval:

Adam Smith

Date

Chief Advisor/Associate Professor/Director of Visual Communication Design program/School of Design, College of Art and Design

Mike Strobert

Date

Associate Advisor/Senior Lecturer/School of Design, College of Art and Design

Abstract

Traveling with group tours can no longer meet the needs of tourists. In-depth tourism has become a new choice for Chinese tourists, especially middle- and high-income groups. Outbound travel, tourists need to find far away from the hustle and bustle of the city and to deeply understand the cultural heritage and folklore origins. Pursue a personal experience of natural beauty and artistic style or a bold exploration of the way of life and the essence of life.

The rapid development of the tourism industry and the proliferation of user-shared content have made the problem of information overload in the field of tourism increasingly prominent. How to help tourists quickly develop personalized tour routes while improving the travel experience has become the key to the current research on tourism route planning. The fear of visiting a new, unfamiliar place could lead stress of travel, making travel plans can also make travel anxiety. Searching for an efficient and local travel experience is very important.

Keywords: Route Planning, Travel, Visual Communication, Local Experience, User Experience

Problem Statement and Solution

Whenever we travel, especially on our own, one thing we have to do is develop plans. Through this process, I usually search famous place online and figure out the route from place to place. But navigating multiple place and lack of knowing local culture is really bothering me about counting time and distance to have an efficient trip plan. For example, if we want to visit three places and try to figure out which way is the most efficient, we just need add three places in the app then the system would automatically calculate the optimal route. As we all known, most space have opening hour and restaurant have crowded hour, depends on that, the system could have a better arrangement about what time for visiting is better. Even adding place in specific time, the system will also notice the opening hours of attractions or restaurants.

For tourist, the journey must be very tired. I hope users can save their time and energy when using this app, shorten the time of arranging the trip and enjoy the journey for a longer time. The fear of visiting a new, unfamiliar place and the stress of travel plans can lead to what's sometimes called travel anxiety. We desire an efficient and local travel experience. Dotrips is a stress-free app that helps tourists arrange travel plans and mindful preparation through customized programs, a local experience database, and complete coverage of the whole process. I strive to reduce travel anxiety and negative emotions through improved travel efficiency physically and emotionally.

Main Body

While maintaining the competitiveness of international tourism, domestic tourism and outbound tourism will enter a period of rapid development. The structure of the tourism industry has gradually changed in recent years. In terms of travel destinations and travel methods, leisure travel has replaced sightseeing travel as the main travel destination, and the parent-child travel market continues to increase in popularity; in the structure of travel crowds, youth has become the main trend, and users under the age of 35 are the main groups of travel users. The proportion of female users has also gradually increased, and the proportion of men and women has been more balanced; in cities of departure and popular tourist destinations, economically developed provinces have a higher degree of travel, and the construction of tourist facilities, cultural environment and gourmet culture in destination cities are considered by the tourist crowd the elements of.

At present, although travelers can conveniently view related information on the Internet when planning their trips, it still takes a lot of time and effort. We could easily find that people travel around the world more frequently and the need of them increased either. It is often the case that many travelers spend a lot of time planning travel routes, but ultimately have to choose to travel in groups, so travelers are increasingly demanding travel planning services.

“Route planning for an afford adventure can be daunting, to say the least. “Just finding a geographical area to explore is often time consuming, and that doesn’t even takes into account the time spent figuring out the cool things to visit in that area and how exactly to get to those things. (Turbodb, 2018)

With the rapid development of the Internet, various types of user-generated content related to daily information are rapidly increasing. In the field of tourism, various forms of travel Spatio-temporal trajectory data have been formed,

such as GPS trajectory, Beidou navigation information, and check-in records.(Xiaolu Zhou, Mingshu Wang, Dongying Li, 2016) The focus of this type of work is to accurately model multiple factors in the travel route planning problem, such as user constraints, attraction opening hours, and travel modes of transportation, and ultimately one or more accurate route planning results that meet the user constraints can be obtained.

Technically, it is hard to know how much data an application uses for route planning but through rough research of testing data usage, we could get a conclusion that route mapping software doesn't use that much data. (Dan Khasis,2017) Besides, as a designer, we need to be living in the future due to technology developing such fast. AI, AR, UX & VR provide so many opportunities for designers to approve their design which could help the user have a better experience. (Invasivecode,2018)

For the aspect of design methods, designers need to think about a step-by-step guide to improving app navigation through UX research. (Jessica Drum,2018) Compared to Google and Apple's walking directions, it could provide me some good examples like how they present screens and guide users. (Stephanie Nguyen,2015) Take Waze as a specific example, "upon opening up the app, the user immediately sees where he/she is located on the map. The search icon on the bottom left corner lights up blue, indicating a CTA."(Eva Monheit,2019) From a single layout and element, I could gain inspiration from it.

At last but not least, I would like to put animation and color choice at the end to talk. "Scientists have studied the physiological effects of certain colors for centuries. Besides aesthetics, colors are the creators of emotions and associations."(Wojciech Zieliński,2017) As a designer, you must also consider the combination of color and animation. Includes Transition from the list to the project, UI Animation Concepts in Realistic Interfaces, and so on. (Tubik Studio,2018)

For design concept, I will an interaction design system for a traveling app that navigates multiple sites to arrange trip plans and give users a better travel experience. Before traveling, after users confirm their destination, they will easily get plans from selecting options. System will automatically set attractions or restaurants where fit user's need in an order. The user also can enter multiple destinations and wait for the system to analyze, and finally, get the best plan. During the journey, after completing the itinerary planning for multiple locations, users can also add new locations at any time. You can also purchase tickets or reserve a restaurant when you have a plan. For local experience, the application will provide huge data support, based on the sharing, commenting and forwarding of a large number of netizens, recommending travel destination activities and special play items in line with the local season for users. For us, traveling is a happy and stress-relieving thing, so try to reduce the time and energy consumption of planning in the early stage.

About the method and evaluation, first, I think the role of interaction design is the process of solving problems. Start with the problem, prove the problem, and find a solution. Through the problems found in life, I will conduct preliminary research first. I use three different research methods: interview, cognitive mapping, and the current system to prove the importance of this problem and the need for in-depth research. Then, set up your own preliminary goals, and conduct user analysis and user research. I need to define who my users are and what they need. Through the needs and psychology of different users, set up a prototype, and analyze the psychological changes of one of the typical users. Third, conduct competitive product analysis. I will analyze their advantages and

disadvantages in the same types of websites and apps to provide a reference for my design. Then enter the step of implementing a design, write a variety of solutions through "How might we", and select the ideal production workflow among them. Finally, enter the visual design part. Choose colors to design the logo, and implement Hi-fi mode for each workflow. Wireframes are made through two software, Figma and Principle, showing the interface effect and dynamic effect of the final product.

Conclusion

The rapid development of the tourism industry and the increasingly serious "information overload" problem have made the travel route planning problem widely concerned and applied. Although there are many solutions in the existing route planning problem research, the traditional travel route planning has many deficiencies in the quality and speed of the recommendation results, and the global tourism and smart tourism strategies and the proliferation of user sharing content, which brings more opportunities to the problem of tourism route planning and also brings great challenges. I hope that through the above analysis and design, I can help people have better travel experience and allow tourists to plan routes quickly and efficiently when planning their trips.

Through the research and design process, I successfully solved the problem that helps tourists arrange travel plans and mindful preparation through customized programs, a local experience database, and complete coverage of the whole process. By designing the application, Dotrips can provide users with more travel options and improve the efficiency of planning trips. I strive to reduce travel anxiety and negative emotions through improved travel efficiency physically and emotionally.

However, Dotrips still has a lot of room for improvement in terms of interaction, expanding into more sections, and improving the logical path. In the visual field, with the support of the design system, this project uses conversational UI to form its visual system, which can potentially attract users. In summary, this project innovational solved the problem.

Reference

Drum, Jessica. "Research Finds a Way." Medium. Facebook Research, July 17, 2018. <https://medium.com/facebook-research/research-finds-a-way-a97120f40ff1>.

Invasivecode. "AI, AR, UX & VR. We're Living in the FUTURE. Designers Need to Be Prepared." Medium. Medium, April 2, 2018. <https://medium.com/@invasivecode/ai-ar-ux-vr-were-living-in-the-future-designers-need-to-be-prepared-2a986ea04879>.

Khasis, Dan. "Route Mapping Software Doesn't Use That Much Data." Medium. Medium, May 19, 2017. <https://medium.com/@dankhasis/route-mapping-software-doesnt-use-that-much-data-2b339c2088d0>.

Monheit, Eva. "Reflection Point: Waze's Design Patterns and Flows." Medium. Medium, March 23, 2019. <https://medium.com/@chavimonheit/reflection-point-wazes-design-patterns-and-flows-639a3977678a>.

Nguyen, Stephanie. "Google vs. Apple Walking Directions: 10 Design Differences." Medium. Medium, September 17, 2015. <https://medium.com/@nguyenist/google-vs-apple-walking-directions-10-design-differences-e4cb90eba89a>.

Tubik. "Animation in Ui Design: From Concept to Reality." Medium. UX Planet, May 15, 2018. <https://uxplanet.org/animation-in-ui-design-from-concept-to-reality-85c49907b19d>.

Turbodb. "Planning a TRIP/ROUTE Part 1 (Google EARTH, GPX, KML, and More)." Medium. AdventureTaco, August 11, 2018. <https://medium.com/adventuretaco/planning-a-trip-route-part-1-google-earth-gpx-kml-and-more-4075b28bb46b>.

Xiaolu Zhou, Mingshu Wang, Dongying Li. From stay to play-a travel planning tool based on crowdsourcing user-generated contents[J]. *Applied geography*, 2017, 78: 1-11. DOI:[10.1016/j.apgeog.2016.10.002](https://doi.org/10.1016/j.apgeog.2016.10.002)

Zieliński, Wojciech. "How to Use Colors in UI Design." Medium. Prototypr, January 19, 2019. <https://blog.prototypr.io/how-to-use-colors-in-ui-design-16406ec06753>.

Appendix A References and Bibliography

- Drum, Jessica. "Research Finds a Way." Medium. Facebook Research, July 17, 2018. <https://medium.com/facebook-research/research-finds-a-way-a97120f40ff1>.
- Invasivecode. "AI, AR, UX & VR. We're Living in the FUTURE. Designers Need to Be Prepared." Medium. Medium, April 2, 2018. <https://medium.com/@invasivecode/ai-ar-ux-vr-were-living-in-the-future-designers-need-to-be-prepared-2a986ea04879>.
- Khasis, Dan. "Route Mapping Software Doesn't Use That Much Data." Medium. Medium, May 19, 2017. <https://medium.com/@dankhasis/route-mapping-software-doesnt-use-that-much-data-2b339c2088d0>.
- Lee, Felix. "Planning a Trip Can Be Overwhelming... so We Reimagined It - a Case Study." Medium. UX Collective, April 24, 2020. <https://uxdesign.cc/planning-a-trip-can-be-overwhelming-so-we-decided-to-reimagine-it-a-case-study-66d80ecde6ce>.
- Lockett, Eleesha. "Understanding and Dealing with Your Travel Anxiety: Tips to Try Today." Healthline. Healthline Media, July 30, 2019. <https://www.healthline.com/health/anxiety/travel-anxiety>.
- Monheit, Eva. "Reflection Point: Waze's Design Patterns and Flows." Medium. Medium, March 23, 2019. <https://medium.com/@chavimonheit/reflection-point-wazes-design-patterns-and-flows-639a3977678a>.
- Nguyen, Stephanie. "Google vs. Apple Walking Directions: 10 Design Differences." Medium. Medium, September 17, 2015. <https://medium.com/@nguyenist/google-vs-apple-walking-directions-10-design-differences-e4cb90eba89a>.
- Tubik. "Animation in Ui Design: From Concept to Reality." Medium. UX Planet, May 15, 2018. <https://uxplanet.org/animation-in-ui-design-from-concept-to-reality-85c49907b19d>.
- Turboddb. "Planning a TRIP/ROUTE Part 1 (Google EARTH, GPX, KML, and More)." Medium. AdventureTaco, August 11, 2018. <https://medium.com/adventuretaco/planning-a-trip-route-part-1-google-earth-gpx-kml-and-more-4075b28bb46b>.
- Xiaolu Zhou, Mingshu Wang, Dongying Li. From stay to play-a travel planning tool based on crowdsourcing user-generated contents[J]. *Applied geography*, 2017, 78: 1-11. DOI:[10.1016/j.apgeog.2016.10.002](https://doi.org/10.1016/j.apgeog.2016.10.002)
- Zieliński, Wojciech. "How to Use Colors in UI Design." Medium. Prototypy, January 19, 2019. <https://blog.prototypy.io/how-to-use-colors-in-ui-design-16406ec06753>.

Appendix B Thesis Defense Presentation

Field: UI/UX Design

Year: 2021

Designer: VCDE Shenyu Zhang

Instructor: Adam Smith, Mike Strobert



Dotrips

Simple Trip, Simple Plan.

An editorial app that helps tourists to solve the problem of customizing travel plans easily with local experience.

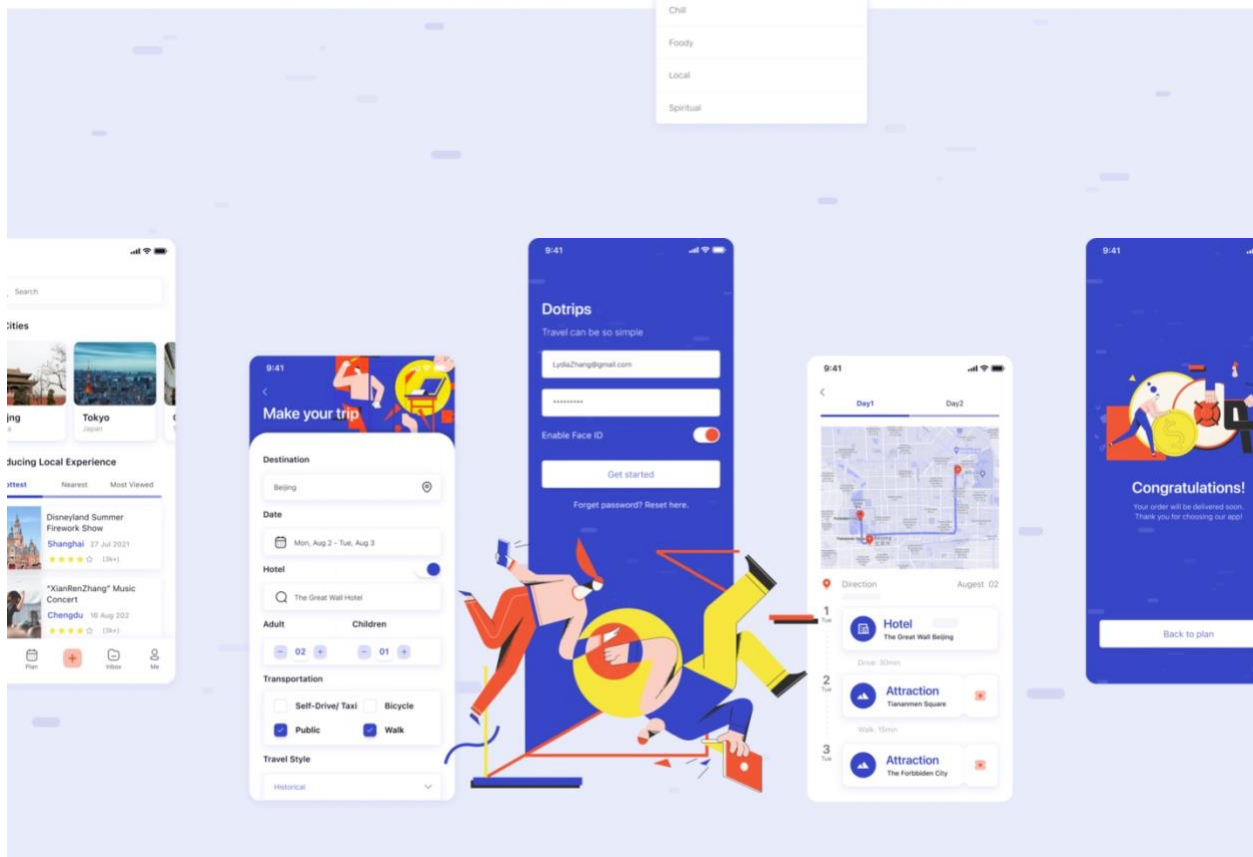
Problem

The fear of visiting a new, unfamiliar place and the stress of travel plans can lead to what's sometimes called travel anxiety. We desire an efficient and local travel experience.

Solution


Dotrips is a stress-free app that **helps tourists arrange travel plans and mindful preparation** through customized programs, a local experience database, and complete coverage of the whole process. I strive to reduce travel anxiety and negative emotions through improved travel efficiency physically and emotionally.

"I want to have a **trip**"



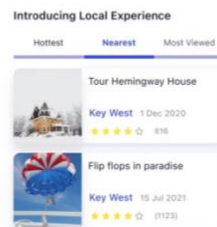
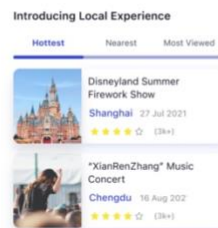
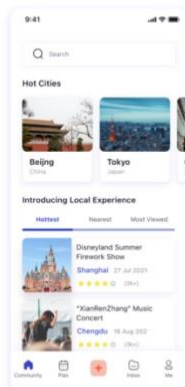
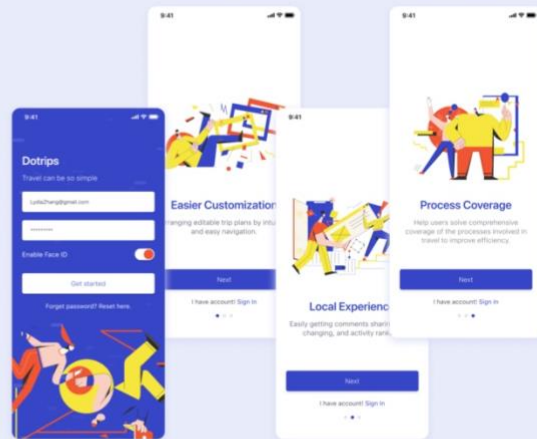
Goal


Adaptive and flexible


Simple and User-friendly


Authoritative and Valid


Intuitive and Smart

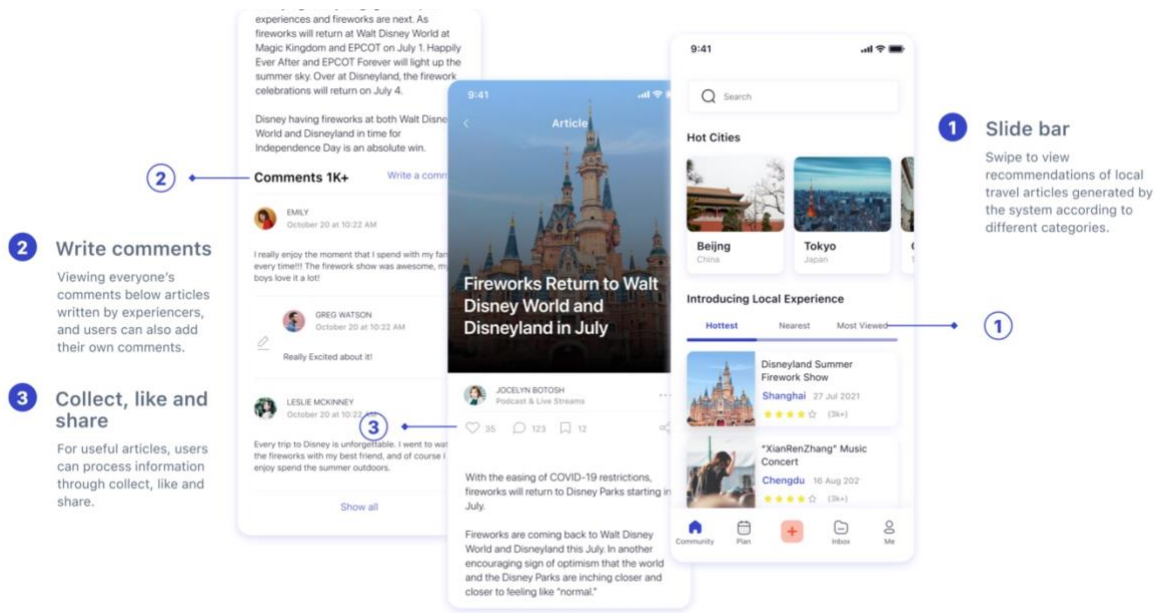


Key feature

1 Local experience

With the support of big data and artificial intelligence analysis, the platform provides users with updated local experience information, comments sharing, news changing, and activity ranking.

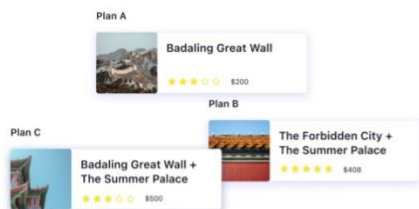




Key feature

2 Easier customization

Through simply clear choices, users could arrange editable trip plans which meet their needs.



1 Destination

Beijing

2 Date

Mon, Aug 2 - Tue, Aug 3

3 Hotel

The Great Wall Hotel

Adult **Children**

02 00

Transportation

☐ Self-Drive/ Taxi ☐ Bicycle

☒ Public ☒ Walk

Travel Style

Choose

Seasonal

Apply

1 Information Input

Through input destination, date and hotel to let system help make the plan.

2 Easy buttons

Through the simple control of the buttons, other personalized options such as the number of travelers can be adjusted.

3 Dropdown

The system provides a description of travel style, and the drop-down menu can quickly realize the choice of travel style.



9:41

Make your trip

Destination
Beijing

Date
Mon, Aug 2 - Tue, Aug 3

Hotel
The Great Wall Hotel

Adult Children
01 00

Transportation
☐ Self-Drive/ Taxi ☐ Bicycle
☒ Public ☒ Walk

Travel Style
Choose

Destination
Beijing

Date
Mon, Aug 2 - Tue, Aug 3

Hotel
The Great Wall Hotel

Adult Children
02 00

Transportation
☒ Self-Drive/ Taxi ☐ Bicycle
☒ Public ☒ Walk

Travel Style
Choose

Foody
Historical
Others

Destination
Beijing

Date
Mon, Aug 2 - Tue, Aug 3

Hotel
The Great Wall Hotel

Adult Children
02 00

Transportation
☒ Self-Drive/ Taxi ☐ Bicycle
☒ Public ☒ Walk

Travel Style
Historical

Seasonal

Apply

9:41

Make your trip

Plan A
Badaling Great Wall
★★★★★ \$200

Plan B
The Forbidden City + The Summer Palace
★★★★★ \$408

Plan C
Badaling Great Wall + The Summer Palace
★★★★★ \$500

9:41

August

SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

10:00 AM 02 August Tuesday
Location: Tiananmen Square
Time: 30 min

2:00PM 02 August Tuesday
Location: The Imperial Palace (the Forbidden City)
Time: 30 min

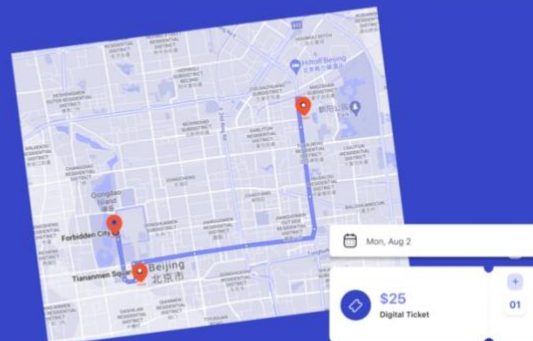
10:00AM 03 August Tuesday
Location: Badaling Great Wall
Time: 50 min

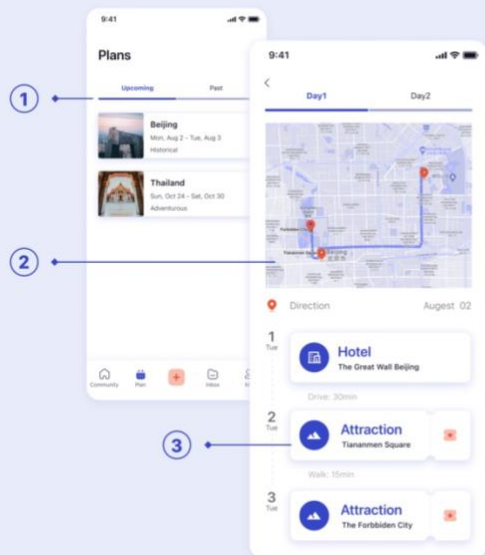
Confirm

Key feature

3 All-round Process Coverage

Help users solve comprehensive coverage of the processes involved in travel to improve efficiency.





1 Slide bar

By swiping, you can view the travel plans that have been generated and those that have been completed.

2 Navigate

After taking into account the location of the hotel, the order of the attractions corresponds to the order of travel on the map.

The system helps users to conduct multi-point navigation according to multiple locations in the travel plan to form the most time-saving and most efficient route.

3 Purchase or reserve

At the same time, the itinerary plan involves the need to purchase tickets or make reservations for attractions, and the platform also provides direct purchase services.

4 Browse

Swipe vertically to browse information about attraction tickets.

5 Easy buttons

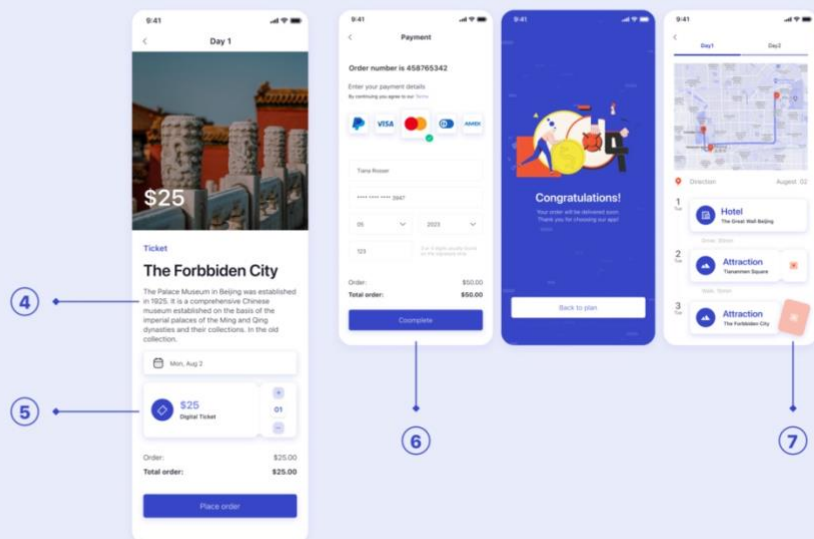
Simple buttons can adjust the number of tickets purchased.

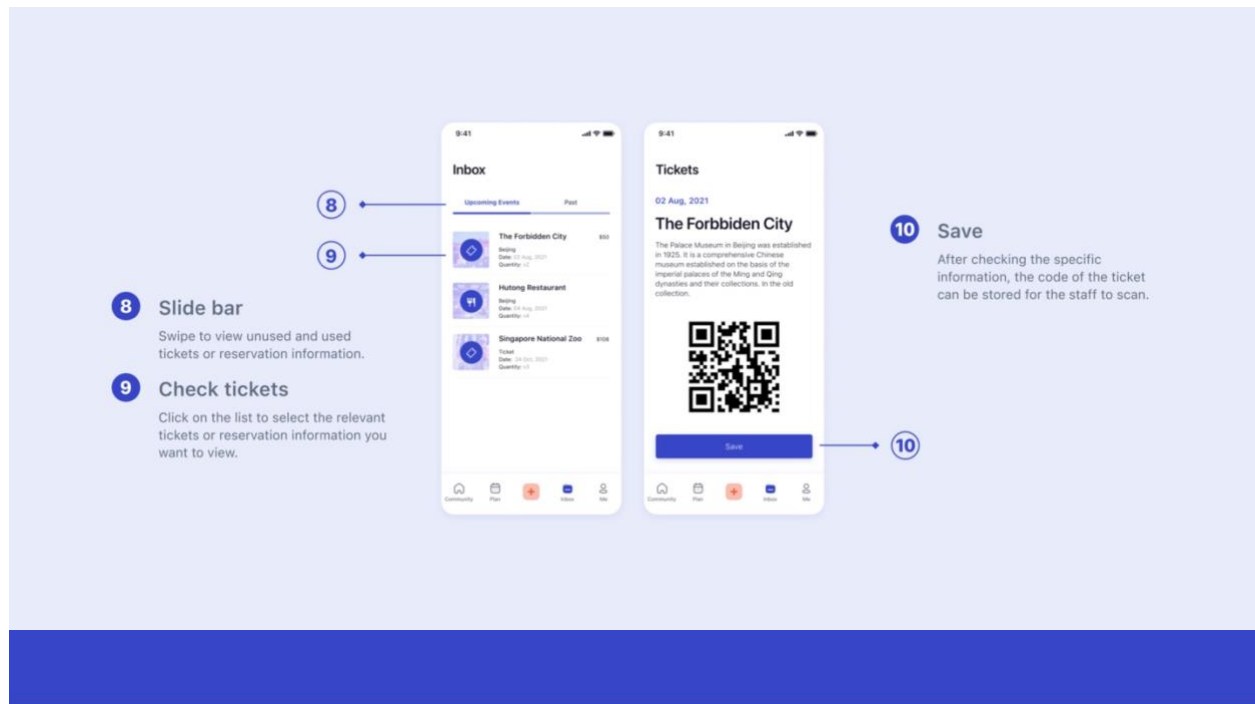
6 Payment

By filling in the information and choosing, the payment process is simple and clear.

7 Purchased or reserved

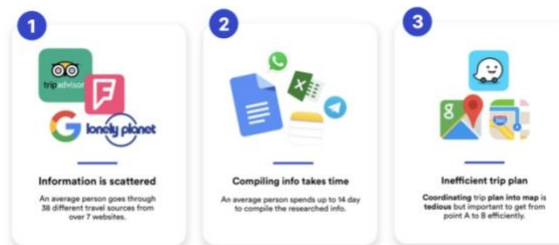
After the purchase is successful, the conversational UI enables the user to easily get the information.





How did I get there?

Problem comes from



Research — Define — Ideate — Visual

Initial research

Thesis

Interview

Persona

Journey map

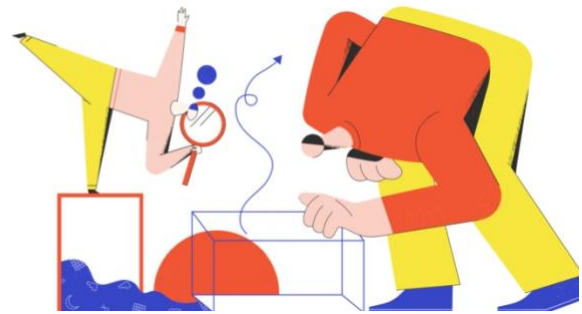
Sketches

Workflow

Wireframe

Design System

Visual Mockup



Initial Research - Thesis

How to Overcome Your Travel Anxiety

Symptoms | Causes | Tips | Diagnosis | Takeaway

While not an officially diagnosed mental health condition, for certain people, anxiety about traveling can become serious, stopping them from going on a vacation or enjoying any aspect of traveling.

Negative associations with traveling can develop from a variety of experiences. In one study, 65 percent of people who had been in a major car accident developed travel anxiety.

Planning a trip can be overwhelming

Journey | Itineraries | Planning

1. Travelers search via **TripAdvisor (43.8%)** and **Travel Vlogs (62.3%)**
2. They compile searched travel information via **WhatsApp (51.2%)** and **Google Docs (43%)**
3. Competitors' services are too complicated and undelightful to use.
4. Trip-planning sites lack travel contents to choose from.

Lockett, Eleesha. "Understanding and Dealing with Your Travel Anxiety: Tips to Try Today." Healthline. Healthline Media, July 30, 2019.
<https://www.healthline.com/health/anxiety/travel-anxiety>.

Lee, Felix. "Planning a Trip Can Be Overwhelming... so We Reimagined It - a Case Study." Medium. UX Collective, April 24, 2020.
<https://uxdesign.cc/planning-a-trip-can-be-overwhelming-so-we-decided-to-reimagi-ne-it-a-case-study-66d80ecde6ce>.

Initial Research - Interview



Jennifer 24

Every time she travels with friends, She needs to **jump back and forth between various apps to complete the preparatory work** required for booking, buying tickets, watching guides, and traveling. She often **forgets which platform she purchased those services on**, which wastes a lot of time.



DianQi 57

Sometimes the itinerary arranged by the travel agency is **too tight**, and there are **crowded people**. He **prefer to do in-depth travel** with my family instead of going to popular and commercialized attractions.



Thiago Rocha 37

His goal is to **experience a place and its culture**; He has always heard that Japan has fireworks festivals every summer, and locals will wear traditional kimonos to participate. As a Westerner, he also wants to **participate and feel the cultural diversity**.

Define - Persona

Peter

Curious Responsible Independent

"My travel style is exploring culture and history."

Age: 38
Occupation: Historian
Status: Married
Location: Washington

Bio

Peter is a historian who loves to travel across the country discovering historical places and experience local culture. He has been backpacking and doing travel plans for a few years. He wants to get as much local information about places and get involved in local activities.

Personality



Frustrations

Less information in the area of interest
Less local activity information of the area
Insufficient travel route planning

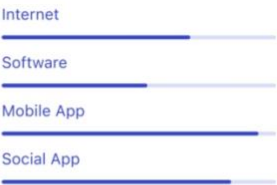
Brand

Google | Expedia | Lyft | Airbnb

Goals

To find a historian and affordable trip
To get local health and safety information
To receive transport and booking information
To be able to find rentals for activities, travel etc

Technology



Define - Journey map

User Story

As a **historian**, I want to travel around the world and explore ancient places. I hope to get more local information and participate in local activities, so I can expand my experience and help my career development, and then I can write related papers.

Before

As a **historian**, he want to travel around the world and explore ancient places. He hope to get more local information and participate in local activities, so he can expand my experience and help my career development, and then he can write related papers.

Peter recently plans to travel to China to explore the mysteries of Beijing's history and culture.

Collect Information

He doesn't know anything about Xi'an, so he could only **search** for relevant information on Google, and at the same time, **use different mobile apps** to try to find tourist attractions with **historical and cultural** characteristics.

Peter has spent a lot of time collating materials. He is **looking forward** to gaining useful knowledge during his travels and having the opportunity to add it to his paper.

Make Plan

Peter integrated the information, **booked tickets**, worked out a route, and **worked out an itinerary** where he wanted to go.

Due to the complex information and unfamiliarity with the local terrain, Peter spent a lot of time making plans, so he felt a little **irritable**.

Trip

Peter came to the destination **according to his own plan**. Unlike ordinary tourists, Peter avoided many famous sights and **went to many places related to history**.

He **was frustrated** of make travel plans, but the goal of expanding historical knowledge has been **successfully achieved**.

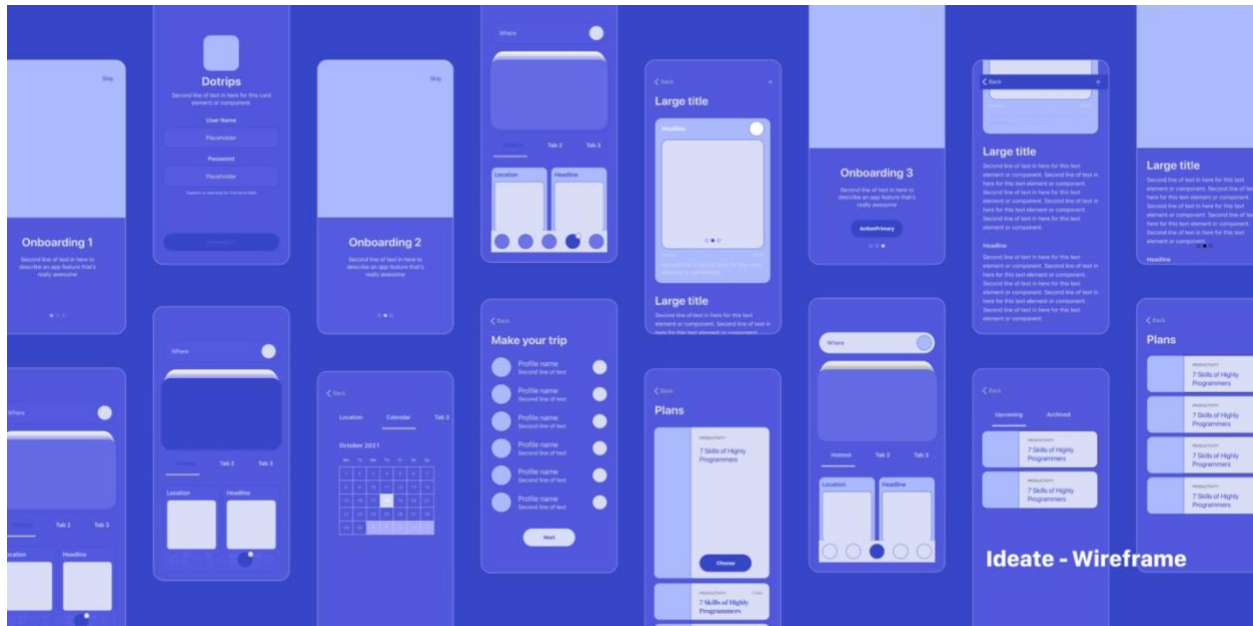
Summarize

After a week of history, Peter returned to his country smoothly and **published a new paper** on what he get.

He feels **really happy** that he could get positive responses from readers who browse his paper.





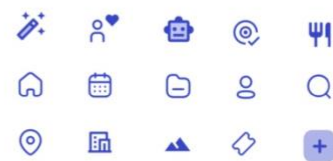


Visual - Design System

Grid

Device type: **Mobile 375**
 Device: **iPhone X / 5.8" (375x812)**
 Number of columns: **4**
 Column width: **64px**
 Gutter width: **30px (15px on each side of a column)**
 Max. container width: **375px**

Icons



Visual - Design System

Typo

Heading 1

SF Pro Display
34px L41

Body

SF Pro Text M
17px L22

Button

SF Pro Text R
16px L22

Heading 2

SF Pro Text SB
20px L25

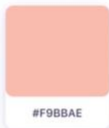
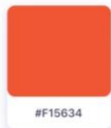
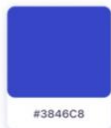
Paragraph

SF Pro Display L
16px L20

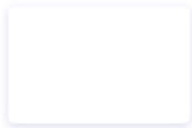
Caption

SF Pro Text M
12px L16

Color



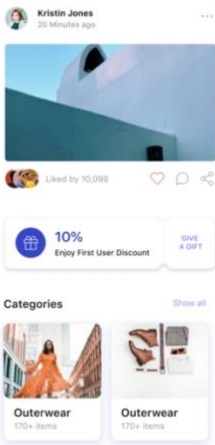
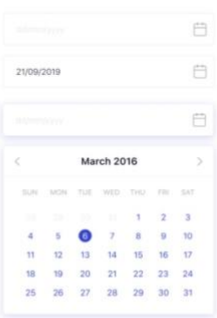
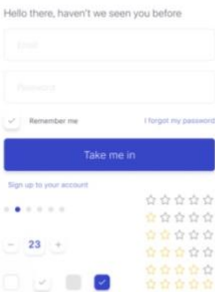
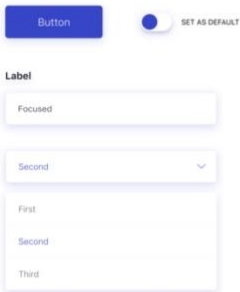
Shadow

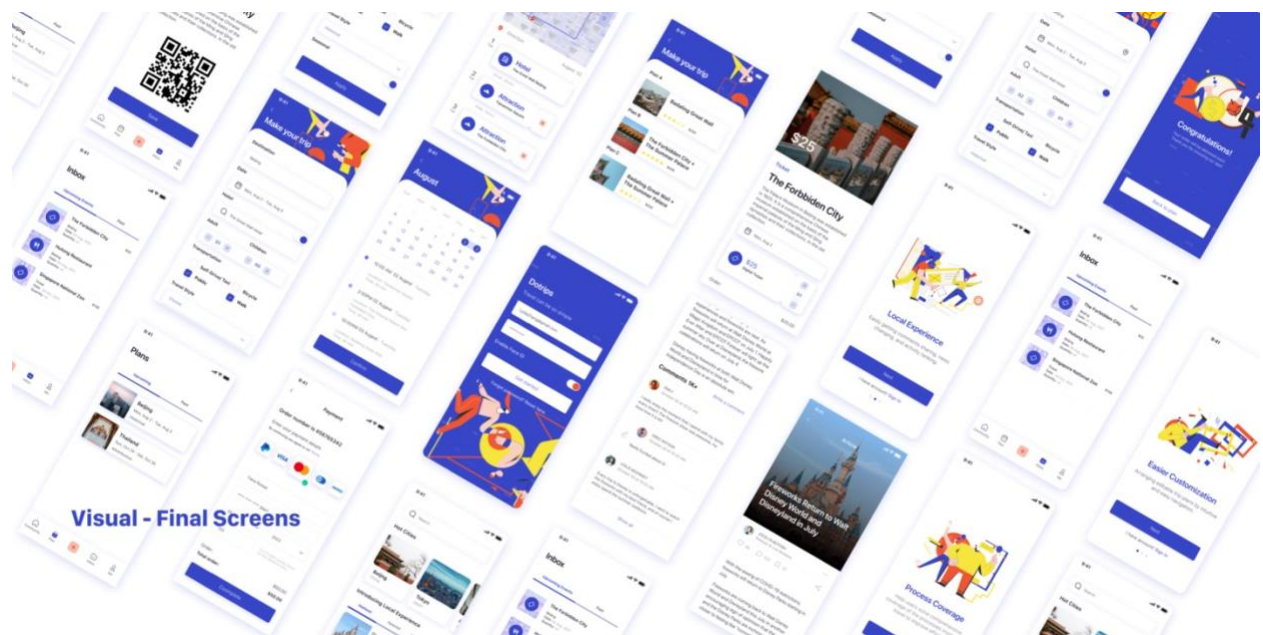


Card - 4dp - Shadow

Visual - Design System

Components





Conclusion

Through the research and design process, I successfully solved the problem that helps tourists arrange travel plans and mindful preparation through customized programs, a local experience database, and complete coverage of the whole process. By designing the application, Dotrips can provide users with more travel options and improve the efficiency of planning trips. I strive to reduce travel anxiety and negative emotions through improved travel efficiency physically and emotionally.

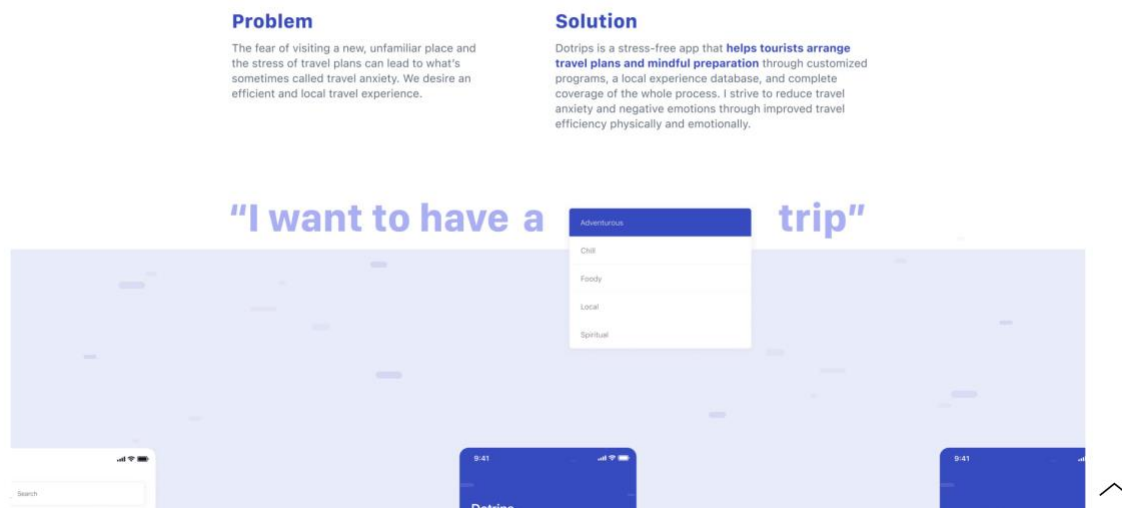
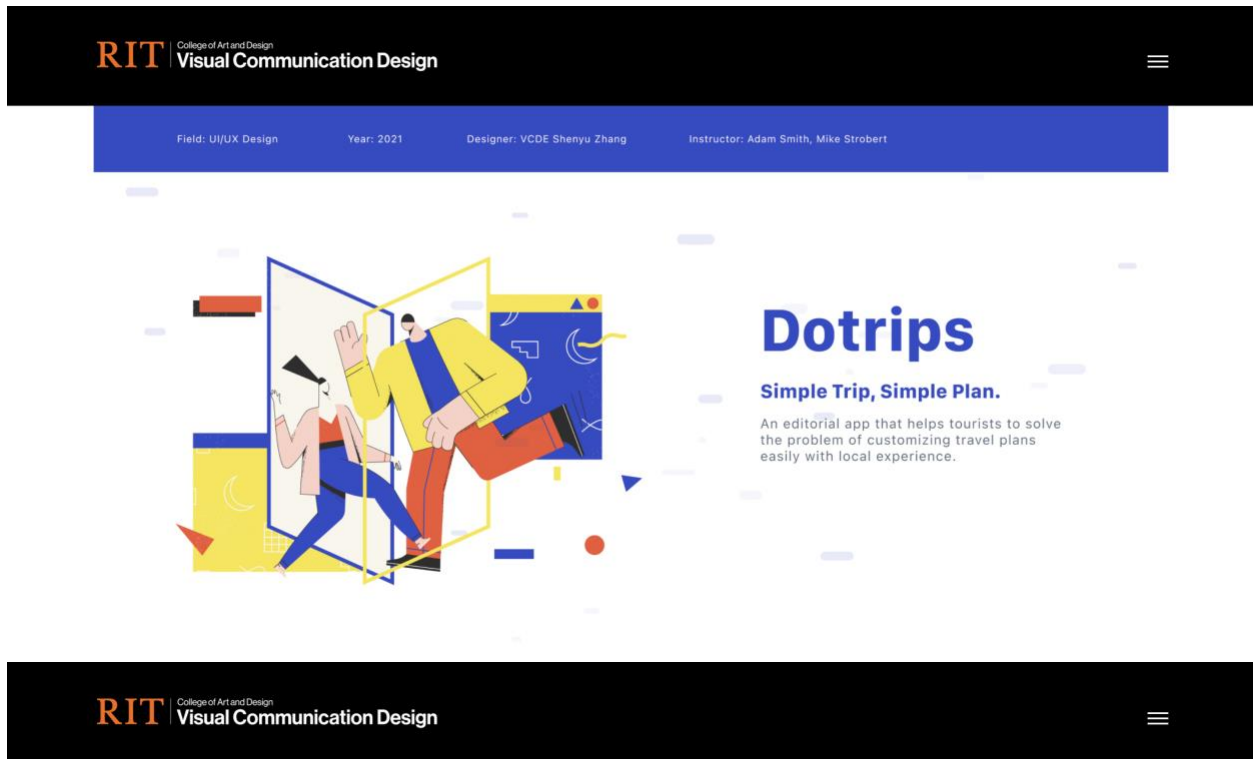
However, Dotrips still has a lot of room for improvement in terms of interaction, expanding into more sections, and improving the logical path. In the visual field, with the support of the design system, this project uses conversational UI to form its visual system, which can potentially attract users. In summary, this project innovational solved the problem.

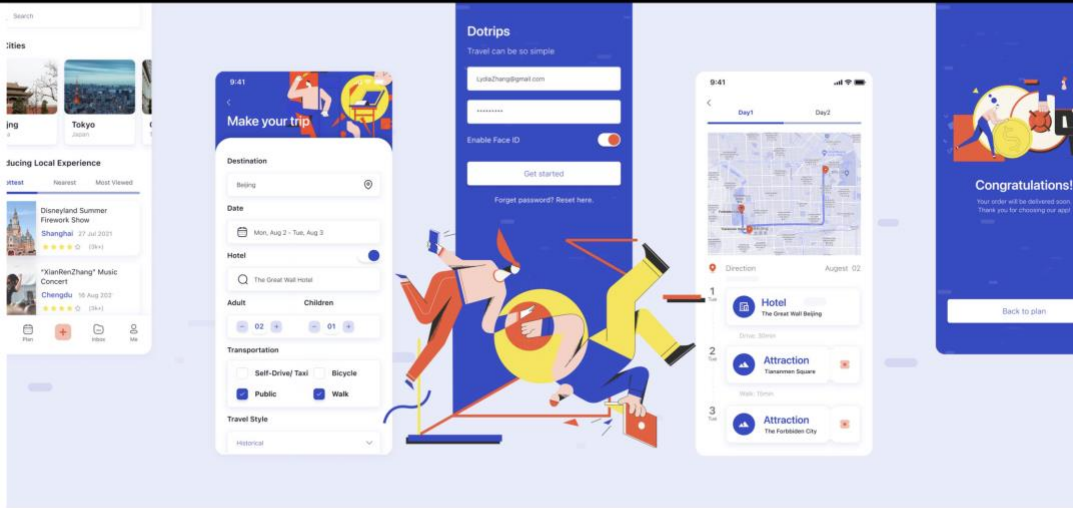


Thanks for watching! 🙏

Appendix C capture of your Thesis website

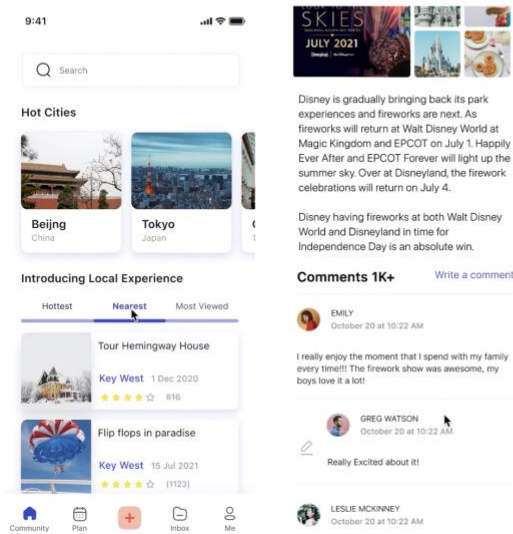
<https://designed.cad.rit.edu/vcdthesis/project/dotrips-shenyu-zhang>





Goal





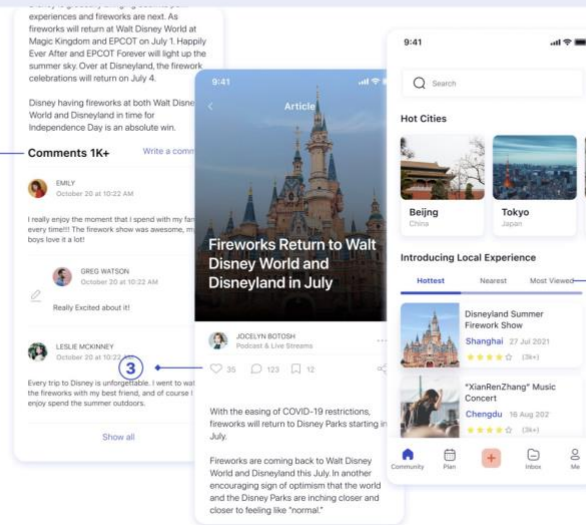
Key feature

1 Local experience

With the support of big data and artificial intelligence analysis, the platform provides users with updated local experience information, comments sharing, news changing, and activity ranking.



- 2 Write comments
Viewing everyone's comments below articles written by experiencers, and users can also add their own comments.
- 3 Collect, like and share
For useful articles, users can process information through collect, like and share.

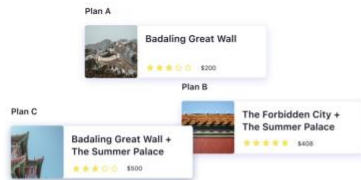


- 1 Slide bar
Swipe to view recommendations of local travel articles generated by the system according to different categories.

Key feature

2 Easier customization

Through simply clear choices, users could arrange editable trip plans which meet their needs.



1 Destination
Beijing

2 Date
Mon, Aug 2 - Tue, Aug 3

Hotel
The Great Wall Hotel

Adult Children
2 00

Transportation
☐ Self-Drive/ Taxi ☐ Bicycle
☒ Public ☒ Walk

Travel Style
Choose

Seasonal

Apply

1 Information Input

Through input destination, date and hotel to let system help make the plan.

2 Easy buttons

Through the simple control of the buttons, other personalized options such as the number of travelers can be adjusted.

3 Dropdown

The system provides a description of travel style, and the drop-down menu can quickly realize the choice of travel style.



9:51

< Make

on, Aug 2 - Tue, Aug 3

he Great Wall Hotel

Children
2 00

tation
☐ Self-Drive/ Taxi ☐ Bicycle
☒ Public ☒ Walk

yle
il

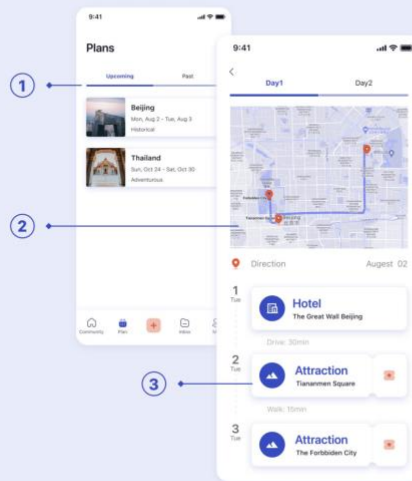
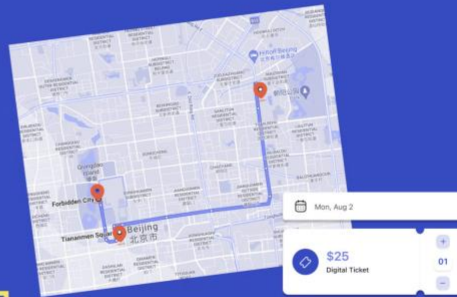
Apply

Plan A
Plan B
Plan C

Key feature

3 All-round Process Coverage

Help users solve comprehensive coverage of the processes involved in travel to improve efficiency.



1 Slide bar

By swiping, you can view the travel plans that have been generated and those that have been completed.

2 Navigate

After taking into account the location of the hotel, the order of the attractions corresponds to the order of travel on the map.

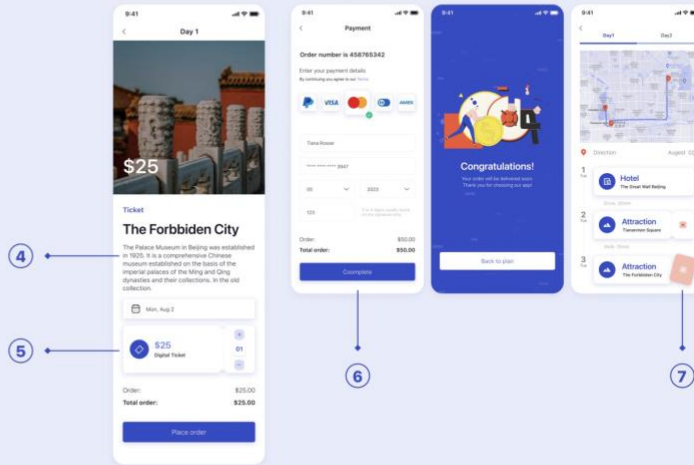
The system helps users to conduct multi-point navigation according to multiple locations in the travel plan to form the most time-saving and most efficient route.

3 Purchase or reserve

At the same time, the itinerary plan involves the need to purchase tickets or make reservations for attractions, and the platform also provides direct purchase services.



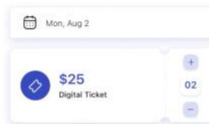
- 4 Browse
Swipe vertically to browse information about attraction tickets.
- 5 Easy buttons
Simple buttons can adjust the number of tickets purchased.
- 6 Payment
By filling in the information and choosing, the payment process is simple and clear.
- 7 Purchased or reserved
After the purchase is successful, the conversational UI enables the user to easily get the information.



Ticket

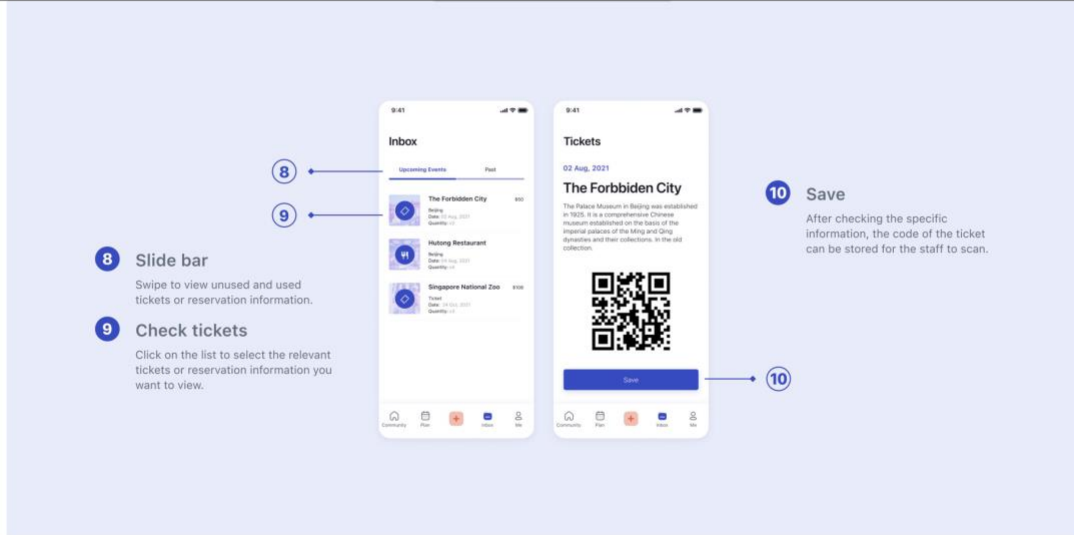
The Forbidden City

The Palace Museum in Beijing was established in 1925. It is a comprehensive Chinese museum established on the basis of the imperial palaces of the Ming and Qing dynasties and their collections. In the old collection.



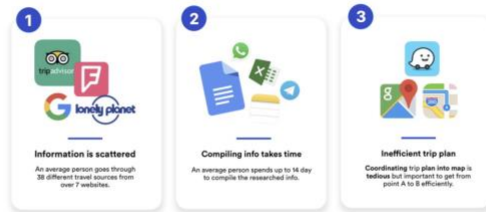
Order: \$50.00
Total order: \$50.00





How did I get there?

Problem comes from



Research — Define — Ideate — Visual

Initial research

Persona

Sketches

Design System

Thesis

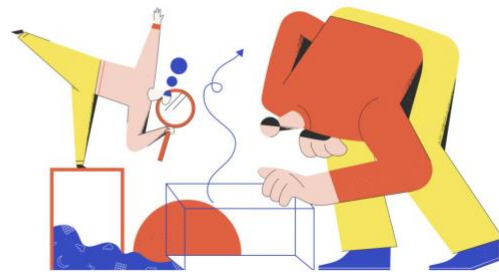
Journey map

Workflow

Visual Mockup

Interview

Wireframe



Initial Research - Thesis

How to Overcome Your Travel Anxiety

Symptoms | Causes | Tips | Diagnosis | Takeaway

While not an officially diagnosed mental health condition, for certain people, anxiety about traveling can become serious, stopping them from going on a vacation or enjoying any aspect of traveling.

Negative associations with traveling can develop from a variety of experiences. In one study, 65 percent Trusted Source of people who had been in a major car accident developed travel anxiety.

Eleesha Lockett, MS. (2019, July 30). How to overcome your travel anxiety. Healthline Media. <https://www.healthline.com/health/anxiety/travel-anxiety>

Planning a trip can be overwhelming

Journey | Itineraries | Planning

1. Travelers search via **TripAdvisor (43.8%)** and **Travel Vlogs (62.3%)**
2. They compile searched travel information via **WhatsApp (51.2%)** and **Google Docs (43%)**
3. Competitors' services are too complicated and undelightful to use.
4. Trip-planning sites lack travel contents to choose from.

Medium. 2021. Planning a trip can be overwhelming... so we reimagined it—a case study. [online] Available at: <<https://uxdesign.cc/planning-a-trip-can-be-overwhelming-so-we-decided-to-reimagine-it-a-case-study-66d80ecde6ce>> [Accessed 5 April 2021].



Initial Research - Interview



Jennifer 24

Every time she travels with friends, She needs to **jump back and forth between various apps to complete the preparatory work** required for booking, buying tickets, watching guides, and traveling. She often **forgets which platform she purchased those services on**, which wastes a lot of time.



DianQi 57

Sometimes the itinerary arranged by the travel agency is **too tight**, and there are **crowded people**. He **prefer to do in-depth travel** with my family instead of going to popular and commercialized attractions.



Thiago Rocha 37

His goal is to **experience a place and its culture**. He has always heard that Japan has fireworks festivals every summer, and locals will wear traditional kimonos to participate. As a Westerner, he also wants to **participate and feel the cultural diversity**.



Define - Persona

Peter Curious Responsible Independent

"My travel style is exploring culture and history."

Age: 38
Occupation: Historian
Status: Married
Location: Washington

Bio

Peter is a historian who loves to travel across the country discovering historical places and experience local culture. He has been backpacking and doing travel plans for a few years. He wants to get as much local information about places and get involved in local activities.

Personality



Frustrations

Less information in the area of interest
Less local activity information of the area
Insufficient travel route planning

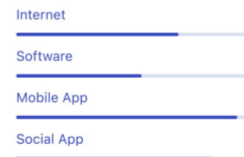
Brand

Google | Expedia | Lyft | Airbnb

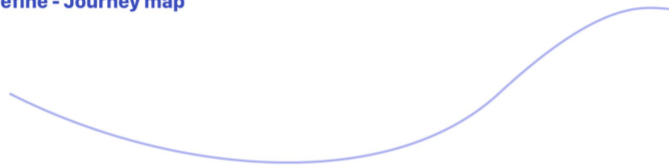
Goals

To find a historian and affordable trip
To get local health and safety information
To receive transport and booking information
To be able to find rentals for activities, travel etc

Technology



Define - Journey map



User Story

As a **historian**, I want to travel around the world and explore ancient places. I hope to get more local information and participate in local activities, so I can expand my experience and help my career development, and then I can write related papers.

Before

As a **historian**, he want to travel around the world and explore ancient places. He hope to get more local information and participate in local activities, so he can expand my experience and help my career development, and then he can write related papers.

Peter recently plans to travel to China to explore the mysteries of Beijing's history and culture.

Collect Information

He doesn't know anything about Xian, so he could only **search** for relevant information on Google, and at the same time, **use different mobile apps** to try to find tourist attractions with **historical and cultural** characteristics.

Peter has spent a lot of time collating materials. He is **looking forward** to gaining useful knowledge during his travels and having the opportunity to add it to his paper.

Make Plan

Peter integrated the information, **booked tickets**, worked out a route, and **worked out an itinerary** where he wanted to go.

Due to the complex information and unfamiliarity with the local terrain, Peter spent a lot of time making plans, so he felt a little **irritable**.

Trip

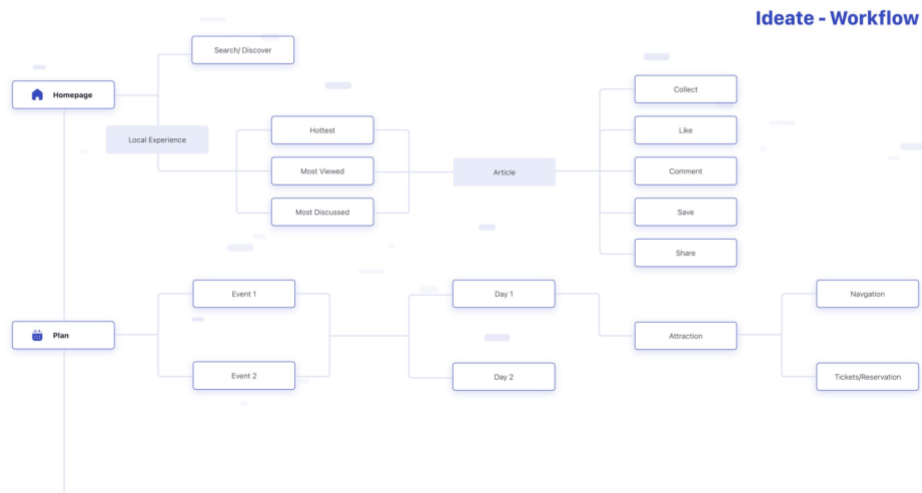
Peter came to the destination **according to his own plan**. Unlike ordinary tourists, Peter avoided many famous sights and **went to many places related to history**.

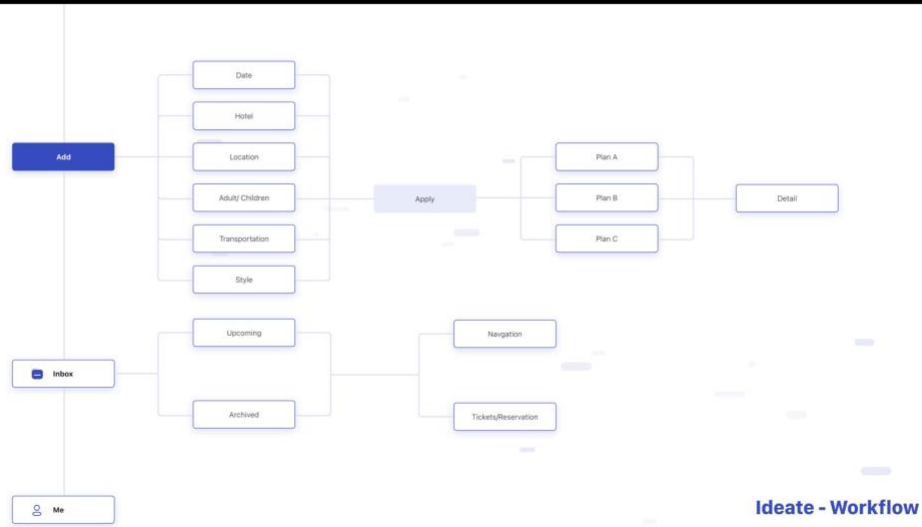
He was **frustrated** of make travel plans, but the goal of expanding historical knowledge has been **successfully achieved**.

Summarize

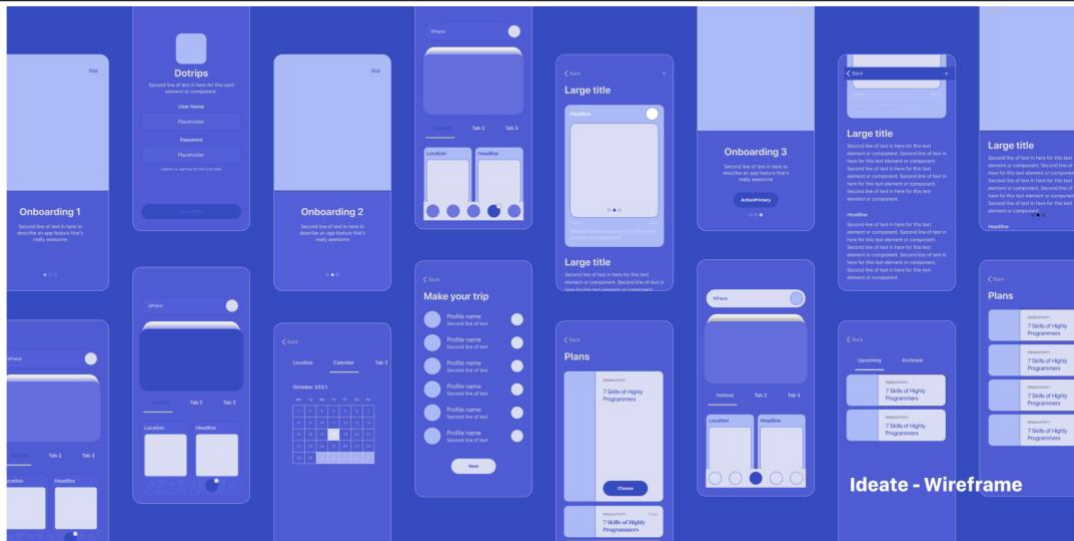
After a week of history, Peter returned to his country smoothly and **published a new paper** on what he get.

He feels **really happy** that he could get positive responses from readers who browse his paper.





Ideate - Workflow



Ideate - Wireframe

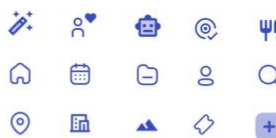


Visual - Design System

Grid

Device type: **Mobile 375**
 Device: **iPhone X / 5.8" (375x812)**
 Number of columns: **4**
 Column width: **64px**
 Gutter width: **30px (15px on each side of a column)**
 Max. container width: **375px**

Icons



Visual - Design System

Typo

Heading 1

SF Pro Display
34px L41

Body

SF Pro Text M
17px L22

Button

SF Pro Text R
16px L22

Heading 2

SF Pro Text SB
20px L25

Paragraph

SF Pro Display L
16px L20

Caption

SF Pro Text M
12px L16

Color



#3846C8



#AABAFD



#E8EBFA



#F15634

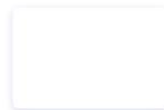


#F9BBAE



#FBD1C6

Shadow

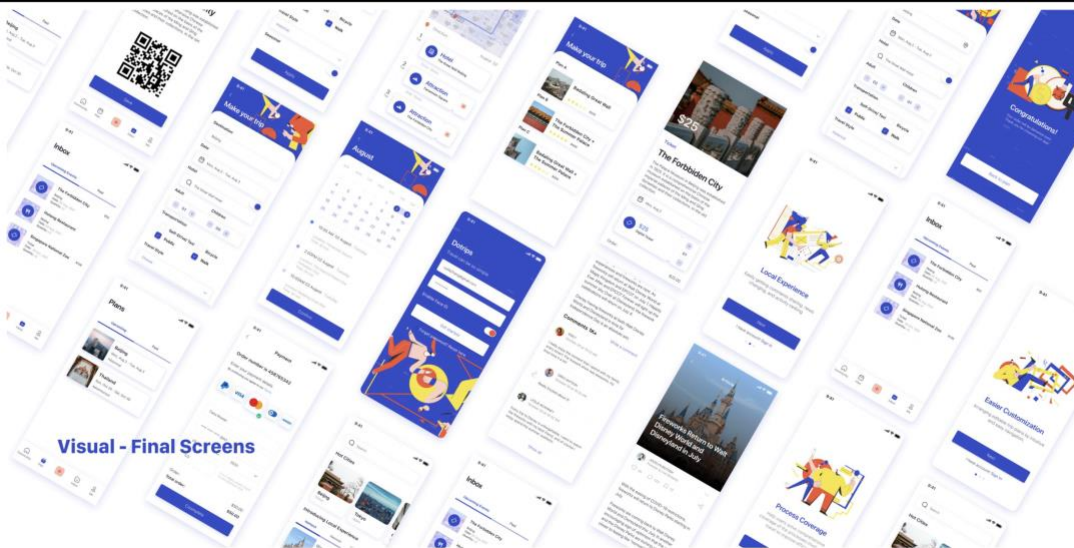
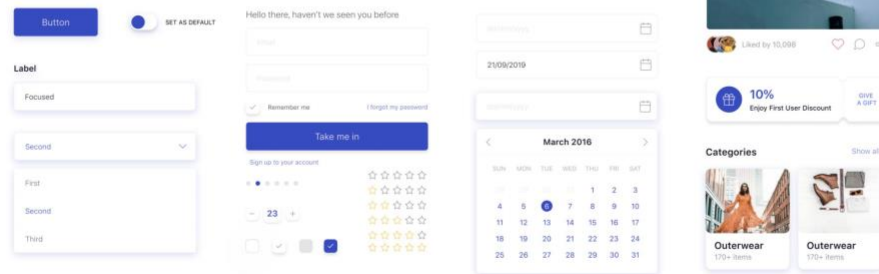


Card - 4dp - Shadow



Visual - Design System

Components



Conclusion

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